AMENDMENTS TO THE CLAIMS

1. (Original) A method for labeling a cell, the method comprising contacting the cell *ex vivo* with a fluorocarbon imaging reagent under conditions such that the fluorocarbon imaging reagent becomes associated with the cell.

2. (Original) The method of claim 1, wherein the fluorocarbon imaging reagent is a perfluoropolyether.

3. (Original) The method of claim 1, wherein the cell is contacted with the fluorocarbon imaging reagent in the presence of an uptake enhancing reagent.

4. (Original) The method of claim 3, wherein the uptake enhancing reagent comprises a cationic lipid.

5. (Original) The method of claim 1, wherein at least a portion of the fluorocarbon imaging reagent is internalized into the cell.

6. (Original) The method of claim 1, wherein at least a portion of the fluorocarbon imaging reagent is associated with the extracellular surface of the cell.

7. (Original) The method of claim 1, wherein the fluorocarbon imaging reagent is conjugated to a cellular targeting moiety.

8. (Original) The method of claim 7, wherein the cellular targeting moiety comprises an antibody that binds to an epitope that is exposed to the extracellular milieu.

9. (Original) The method of claim 1, wherein the fluorocarbon imaging reagent is conjugated to an internalization moiety.

10. (Original) The method of claim 1, wherein the cell is a mammalian cell.

11. (Original) The method of claim 1, wherein the cell is a cell of the immune system.

12. (Original) The method of claim 1, wherein the cell is a dendritic cell.

13. (Original) The method of claim 1, wherein the fluorocarbon imaging reagent is formulated as an emulsion.

14. (Original) The method of claim 1, wherein the emulsion comprises particles having a mean diameter of between 30 and 500 nm.

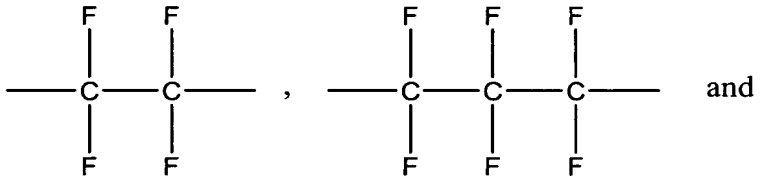
15. (Original) The method of claim 1, wherein the fluorocarbon imaging reagent is a perfluoro-crown ether.

16. (Original) The method of claim 15, wherein the imaging reagent is a perfluro-15-crown-5-ether.

17. (Original) The method of claim 1, wherein the fluorocarbon is a perfluorinated polyether having an average formula:

$XO(Y\text{-}O)_nZ$

wherein Y is selected from the group consisting of: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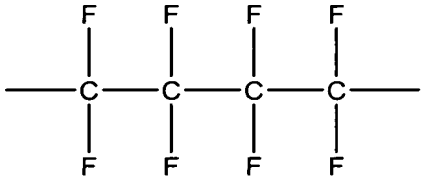


wherein n is an integer from 8 to 20; wherein X and Z are the same and are selected from the group consisting of perfluoroalkyls, perfluoroethers, fluoroalkyls terminated with fluoroacyl, carboxyl, amide or ester, methylols, acid chlorides, amides, amidines, acrylates and esters.

18. (Original) The method of claim 1, wherein the imaging reagent comprises an additional functional moiety.

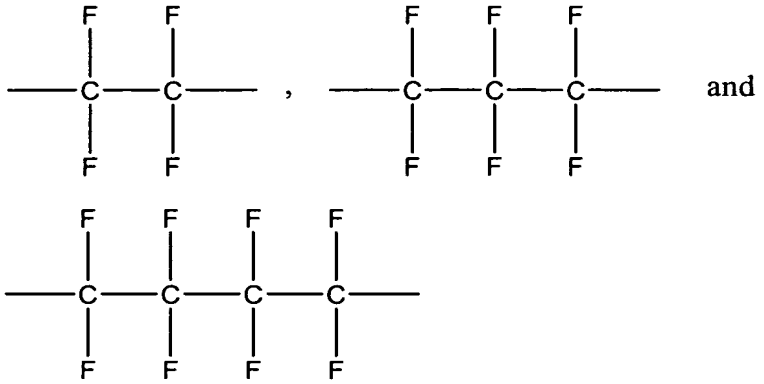
19. (Original) The method of claim 18, wherein the additional functional moiety is a detection moiety.

20. (Original) The method of claim 19, wherein the detection moiety is selected from the group consisting of: a fluorescent detection moiety and a PET detection moiety.

21. (Original) An imaging reagent having an average formula:

$XO(Y\text{-}O)_nZ$

wherein Y is selected from the group consisting of:



and

wherein n is an integer from 8 to 20; wherein X and Z are the same and are selected from the group consisting of perfluoroalkyls, perfluoroethers, fluoroalkyls terminated with fluoroacyl, carboxyl, amide or ester, methylols, acid chlorides, amides, amidines, acrylates and esters.

22. (Original) The imaging reagent of claim 21, wherein n=11.

23. (Original) The imaging reagent of claim 21, wherein X and Z are perfluoroethers terminated with a carboxyl group.

24. (Original) The imaging reagent of claim 21, wherein each carboxyl is derivatized with a polyethylene glycol.

25. (Original) The imaging reagent of claim 21, wherein X and Z are derivatized with a fluorescent detection moiety.

26. (Original) A linear fluorocarbon derivatized at one or more polymer ends with at least one functional moiety, wherein the at least one functional moiety is selected from the group consisting of: a detection moiety, a hydrophilic moiety, a targeting moiety and a cellular uptake moiety.

27-29. (Cancelled)

30. (Original) An emulsion comprising a perfluoropolyether and having a particle size ranging from 10 to 500 nm.

31. (Original) The emulsion of claim 30, wherein the emulsion is stable at temperatures ranging from 4°C to 37°C.

32. (Original) A method for detecting a cell in a subject, the method comprising:

a. administering to the subject a cell that is labeled with a fluorocarbon imaging reagent; and

b. examining at least a portion of the subject by a nuclear magnetic resonance technique, thereby detecting a labeled cell in the subject.

33-44. (Cancelled)

45. (Original) A labeled cellular formulation for administration to a subject, the formulation comprising:

c. a cell; and

d. a fluorocarbon imaging reagent that is associated with the cell.

46-56. (Cancelled)

57. (Original) A method for detecting transplanted cells in a transplant recipient, the method comprising:

e. administering cells for transplant to a transplant recipient, at least a portion of which cells for transplant are labeled with a fluorocarbon imaging reagent;

f. examining at least a portion of the subject by a nuclear magnetic resonance technique, thereby detecting the labeled cells.

58-64. (Canceled)

65. (New) The emulsion of claim 30, comprising a physiologically acceptable buffer.

66. (New) The emulsion of claim 65, further comprising an uptake enhancing reagent.

67. (New) The emulsion of claim 66, wherein the uptake enhancing reagent comprises a surfactant.

68. (New) The emulsion of claim 67, wherein the surfactant is a Pluronic.